

In the Claims

Claim 1 (previously presented): A process for halogenating compounds comprising:
providing a first mixture comprising both first and second isomers of a hydrofluorinated compound, the first mixture having a first ratio of the first isomer to the second isomer; and

contacting the mixture with a halogenating agent to form a second mixture having a second ratio of the first isomer to the second isomer, the first ratio being less than the second ratio.

Claim 2 (previously presented): The process of claim 1 wherein the hydrofluorinated compound comprises C_3F_7H , the first isomer comprises CF_3CFHCF_3 , and the second isomer comprises $CF_3CF_2CF_2H$.

Claim 3 (previously presented): The process of claim 1 further comprising contacting the mixture with the halogenating agent in the presence of a catalyst.

Claim 4 (previously presented): The process of claim 1 wherein the contacting comprises heating the mixture to a temperature of from about 200°C to about 350°C.

Claim 5 (previously presented): The process of claim 4 wherein the temperature is at least about 300°C.

Claim 6 (previously presented): The process of claim 1 wherein the halogenating agent comprises Cl_2 .

Claim 7 (previously presented): The process of claim 6 wherein a molar ratio of the Cl_2 to the mixture is from about 0.16:1 to about 3:1.

Claim 8 (previously presented): The process of claim 7 wherein a molar ratio of the Cl_2 to the mixture is at least about 2.5:1.

Claim 9 (previously presented): The process of claim 3 wherein the halogenating agent comprises Cl_2 and the catalyst comprises activated carbon.

Claim 10 (previously presented): The process of claim 9 wherein the hydrofluorinated compound comprises $\text{C}_3\text{F}_7\text{H}$, the first isomer comprises $\text{CF}_3\text{CFHCF}_3$, and the second isomer comprises $\text{CF}_3\text{CF}_2\text{CF}_2\text{H}$.

Claim 11 (previously presented): The process of claim 1 further comprising separating at least a portion of the first isomer from the second mixture.

Claim 12 (previously presented): The process of claim 11 wherein the separating comprises distilling the second mixture to form a solution comprising the portion of the first isomer.